

Appln. No. 09/744,515
Amdt. date January 12, 2004
Reply to Office action of November 13, 2003

REMARKS/ARGUMENTS

Claims 1-18 are pending in the above-referenced matter.

Claims 1-13, 15, and 17-18 are amended to further define Applicant's invention and to more concisely claim Applicant's invention as required by §112, second paragraph. Applicant submits that the amendments place the application in condition for allowance and should therefore be entered.

This is a response to the Final Office Action dated November 13, 2003, which followed Applicant's attorney's telephone interview with the Examiner on Thursday, January 8, 2004. The telephone interview was regarding the primary reference, JP-9112636, and how it differs from the claimed invention, as further discussed below.

The Final Office Action rejected claims 1-14, 17, and 18 for claims "informalities"; claims 1-9, 11, 12, 17, and 18 for anticipation under §102(b) by JP-9112636; claim 10 for obviousness under §103(a) over the combination of JP-9112636 in view of Stieg (U.S. Pat. No. 4,462,271); and claims 13-16 for obviousness under §103(a) over the combination of JP-9112636 in view of Patton et al. (U.S. Pat. No. 4,843,902). As further discussed below, Applicant respectfully traverses the rejections.

Claims 1-14, 17, and 18 Objected for Informalities

Claims 1-14, 17, and 18 are objected for including several informalities, which are presumed to be based on §112, second paragraph. In response thereto, Applicant has amended claims 1-13, 15, and 17-18 and submits that they are now properly recited as required by §112, second paragraph. Notice thereof is respectfully requested.

§102(b) Rejection of Claims 1-9, 11, 12, 17, and 18 by JP-9112636

In rejecting claims 1-9, 11, 12, 17, and 18 by JP-9112636, the Examiner contends that JP-9112636, in figure 3, shows a gearbox adaptor including a casing 8, a hub 41 to be engageable

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with a gear shaft S3 for rotation therewith; at least one piston 45B, 45F mounted within the hub; means for supplying fluid from the exterior of the hub to a first face of said piston so as to move the piston in a first direction; at least one clutch means shown immediately below the arrow of C₁ adjacent the piston, part of the clutch means being engaged with the hub and a different part of the clutch means being engageable with a gear G6 locatable on the gear shaft adjacent the hub, the gear being freely rotatable relative to the shaft, the clutch means being located and arranged such that movement of the piston in the first direction inter-engages the parts of the clutch to drivingly engage the gear and the gear shaft.

As amended, claim 1 recites, a gearbox adaptor comprising a hub adapted to be engageable with a gear shaft for rotation therewith; at least one piston mounted within said hub; means for supplying fluid through an exterior of the hub to a first face of said at least one piston so as to move said at least one piston in a first direction; at least one gear locatable on said gear shaft adjacent said hub; at least one clutch means positioned between said at least one piston and a side wall of said at least one gear, part of said at least one clutch means being engaged with said hub and a different part of said clutch means being engageable with said at least one gear; wherein said at least one gear is freely rotatable relative to said shaft, and said at least one clutch means being located and arranged such that movement of said at least one piston in said first direction inter-engages said parts of said at least one clutch means to drivingly engage said at least one gear with said gear shaft.

As recited, Applicant submits that JP-9112636 does not anticipate claim 1 by disclosing each and every element of the claimed gearbox adaptor. Among other things, as discussed during the telephone interview, JP-9112636 does not disclose means for supplying fluid through an exterior of the hub to a first face of said at least one piston so as to move said at least one piston in a first direction. Instead, a diagonal line is shown in FIG. 3 of JP-9112636, which terminates on both surfaces of the piston of that figure. Thus, if the diagonal line delivers pressurized fluid to the piston, then the pressure is the same on both surfaces of the piston, which equalizes and which cannot move the piston in any direction. As JP-9112636 is written in

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Japanese, Applicant is unable to discern by FIG. 3 how the piston disclosed by JP-9112636 is moved.

Accordingly, unless the Examiner can point to a specific disclosure disclosed by JP-9112636 which comprises supplying fluid through an exterior of the hub to a first face of said at least one piston so as to move said at least one piston in a first direction, the rejection is traversed.

Because claims 2-9, 11, 12, 17, and 18 depend from claim 1, they too are allowable over JP-9112636 for the same reasons as claim 1.

§103(a) Rejection of Claim 10 by JP-9112636 and Stieg

In rejecting claim 10 under §103(a) for obviousness over the combination of JP-9112636 and Stieg, the Examiner contends that Stieg teaches that either pneumatic or hydraulic fluid may be used to operate a clutch assembly and that it would have been obvious to combine the two.

Even if Stieg can be combined with JP-9112636, a point which Applicant does not concede, the combination still does not disclose the manner in which the piston is moved as recited by claim 1. Because claim 10 depends from independent claim 1, the combination therefore does not render claim 10 obvious. Accordingly, the rejection is traversed.

**§103(a) Rejection of Claims 13-16 by
JP-9112636 and Patton et al.**

In rejecting claims 13-16 over the combination of JP-9112636 and Patton et al., the Examiner contends that JP-9112636 describes the invention substantially as set forth above but admits that it does not disclose an electronic control comprising switches, solenoid valves, and a control means. Patton et al. is relied on to teach the use of a fluid flow control system in the environment of a transmission control system including an electronic control means comprising two switches in Col. 6 lines 39-47, solenoid valves as shown in the area of element 30 and a control means 100, 110. The Examiner then contends that it would have been obvious to combine JP-9112636 with Patton et al.

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Even if Patton et al. can be combined with JP-9112636, a point which Applicant does not concede, the combination still does not disclose the manner in which the piston is moved as recited by claim 1. Because claims 13-16 depend from independent claim 1, the combination therefore does not render claims 13-16 obvious. Accordingly, the rejection is traversed.

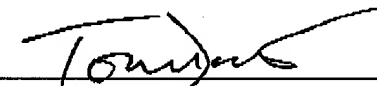
In view of the foregoing remarks and amendments, the application is believed to be in condition for allowance and allowance is respectfully requested.

Should the Examiner find it necessary to speak with Applicant's attorney, she is invited to contact the undersigned at the telephone number indicated below.

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP

By



Tom H. Dao
Reg. No. 44,641
626/795-9900

THD/llb

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